

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Southern Forest Pest Reporter

eserve

423.9

767



ENVIRONMENTAL PROTECTION AND IMPROVEMENT Forest Pest Management Southeastern Area STATE AND PRIVATE FORESTRY

FIELD OFFICES
Asheville, N.C. - Alexandria, La.

FOREST SERVICE
U.S. DEPT OF AGRICULTURE
JULY, 1971

NO. 2

PROCUREMENT SECTION
CURRENT SERIAL RECORDS

1720 PEACHTREE ST. N.W. ATLANTA GA. 30309

SUMMARY OF CONDITIONS



- . . . Southern pine beetle infestations are, in general, endemic and at low levels in the Southeast at the present. There are several localized areas of high beetle activity which include the Vernon R.D. on the Kisatchie N.F., Tusquitee R.D. on the Nantahala N.F., Tellico R.D. on the Cherokee N.F., Davidson and Rowan Counties in North Carolina, and the Delmarva Peninsula.



- . . . Black turpentine beetle populations are normal activity for this time of the year except in the Sand Hills State Forest in South Carolina where heavy timber losses are occurring.



- . . . The Nantucket pine tip moth has been quite active this spring and early summer; however, chemical treatments have considerably reduced populations on the Ouachita, Stuart, and Erambert seed orchards. Damage is continuing on the Beech Creek Orchard despite a March application of phorate.



- . . . The forest tent caterpillar, variable oak leaf caterpillar, and fall cankerworm are defoliating large areas of water tupelo, oaks, ash and hickory in Louisiana and Kentucky; Arkansas, and North Carolina, respectively.



- . . . The needle blight affecting slash and loblolly pine in the Gulf South this past winter has been identified

SUMMARY OF CONDITIONS (Cont'd)

as being caused by *Lophodermellea cerina*, *Hypoderma lethale* and *Lophodermium australe*. The area of infection covered 55 million acres in Texas, Louisiana, Mississippi, Alabama, Georgia, and Florida. Most of the infected trees have recovered from the blight with the onset of new needle growth.

STATUS OF FOREST INSECTS

SOUTHERN PINE BEETLE, *Dendroctonus frontalis* Zimm.

- ARKANSAS There is no activity reported in the State of Arkansas. An annual detection survey by the Division of Forest Pest Control will be made during July, 1971.
- LOUISIANA With the exception of the Vernon Ranger District, southern pine beetle infestations are currently at low levels on the Kisatchie National Forest. This insect is still infesting mature loblolly pine in low, poorly drained areas, especially in the Fort Polk area. Commercial sale of infested material is being utilized as a control measure. An appraisal survey by the Division of Forest Pest Control is planned for June, 1971.
- Moderate activity has been reported in a small area in Allen Parish. Otherwise, activity is at a low level in the rest of the State. (Louisiana Forestry Commission)
- MISSISSIPPI Southern pine beetle populations are at a moderate level on the Homochitto National Forest. Latest records show an average of 30 MBF being salvaged per month for southern pine beetle control. An appraisal survey by the Division of Forest Pest Control will be conducted during July, 1971.
- Populations are endemic in the remainder of the State. No activity has been reported in the forested areas affected by Hurricane Camille. (Mississippi Forestry Commission)
- NORTH CAROLINA The southern pine beetle continues to be a serious problem on the Tusquitee District of the Nantahala National Forest. A survey during April revealed 78 infested trees per 1,000 acres of host type. The State of North Carolina reports southern pine beetle activity significantly reduced from last season. Serious problems are known to exist in Davidson and Rowan counties of the Piedmont and the New Bern District on the Coastal Plain. Less serious infestations are reported in Carteret, Onslow, Rowan, Durham, and Rutherford counties. (Division of Forest Pest Control, North Carolina Forest Pest Newsletter)
- TENNESSEE With the exception of a continuing serious outbreak on the Tellico District of the Cherokee National Forest, southern pine beetle activity is at a low level in Tennessee.

SOUTHERN PINE BEETLE (Cont'd)

- TEXAS Southern pine beetle populations on the National Forests in Texas are currently at endemic levels. Most infestations are small and scattered throughout the Angelina and Sabine National Forests. An appraisal survey by the Division of Forest Pest Control is planned for June, 1971.
- Activity in the rest of the state has been similar to that on the National forests. Infestations increased slightly during April but activity is still below normal for this time of year. (Forest Pest Activity Report, Texas Forest Service)
- VIRGINIA Southern pine beetle activity on the Delmarva Peninsula is continuing at a high level. Surveys conducted by the Virginia Division of Forestry indicate losses to date in Accomack County are in excess of 15 million board feet valued at 600 thousand dollars. (Virginia Division of Forestry)
- BLACK TURPENTINE BEETLE, *Dendroctonus terebrans* (Oliv.)
- ARKANSAS There has been normal activity of black turpentine beetle with increasing populations in the Wickes and Hamburg areas. (Arkansas Pest Reporter)
- MISSISSIPPI Black turpentine beetle populations are at normal levels on the Homochitto National Forest. In some localized situations, salvage operations have been required.
- NORTH CAROLINA The black turpentine beetle is causing damage ranging from insignificant to moderate in Cumberland, Onslow, Lee and Davie counties. (North Carolina Forest Pest Newsletter)
- SOUTH CAROLINA The black turpentine beetle is continuing to cause heavy timber losses on the 92,000 acre Sand Hills State Forest. An estimated 703 dying trees were recorded during a survey in February. The value of timber loss at the time of the survey was estimated to be in excess of \$27,000. (South Carolina Commission of Forestry)
- TENNESSEE The black turpentine beetle caused mortality on a small area of the Oak Ridge Reservation (AEC) following late summer thinning operations in 1970. (Tennessee Forest Pest Monitor)
- TEXAS Black turpentine beetle infestations associated with logging damage has been reported on the Sam Houston and Sabine National Forests. Black turpentine beetle activity

BLACK TURPENTINE BEETLE (Cont'd)

TEXAS
(Cont'd) has been observed on Texas Forest Service Districts 1, 3, 4, 5, Panola, Bastrop and Colorado Counties. Infestations have been confined to small tree "spots" and are related to mechanical injury. (Forest Pest Activity Report, Texas Forest Service)

IPS ENGRAVER BEETLES, *Ips* spp.

ALABAMA A hailstorm hit North Baldwin County causing heavy damage to 1,000 acres and light-moderate damage to 5,000 acres. The heavily damaged timber is being clearcut and the partially damaged stands will be surveyed for bark beetle population buildup. (Alabama Forestry Commission)

ARKANSAS *Ips* activity is normal with no epidemic situations occurring as yet. (Arkansas Pest Reporter)

MISSISSIPPI Bi-monthly surveys are being conducted by the Mississippi Forestry Commission. Some localized activity has been reported in the counties affected by Hurricane Camille. (Mississippi Forestry Commission)

TEXAS Some *Ips* activity has been reported but generally it appears to be at a low level on the National Forests and throughout the State of Texas.

PINE SAWFLIES, *Neodiprion* spp.

ARKANSAS The infestation level of *Neodiprion taedae linearis* in Calhoun County was considered light this year. Weather conditions were responsible for retardation of hatching. (Arkansas Pest Reporter)

FLORIDA A black-headed pine sawfly, *N. excitans* Roh. is continuing to cause moderate to severe defoliation of loblolly pine in Taylor and Dixie counties. The same sawfly is defoliating 300 acres of sand pine near Panama City. The defoliation has resulted in about 10 percent mortality. (Florida Division of Forestry)

The slash pine sawfly *N. merkele* Ross. is defoliating 300 acres of 5- to 8-year old slash pine in Glades County. (Florida Division of Forestry)

PINE SAWFLIES (Cont'd)

- KENTUCKY Scattered generally light infestations of the Virginia pine sawfly *N. pratti pratti* (Dyar) occurred on the Daniel Boone National Forest and on private land in adjoining counties. Light to moderate Virginia pine sawfly infestations also occurred on the Mammoth Cave National Park and surrounding area. (Division of Forest Pest Control and Kentucky Division of Forestry)
- Sawfly infestations, probably the Arkansas sawfly *N. taedae linearis* Ross. occurred in western Kentucky, south of Paducah. (Kentucky Division of Forestry)
- LOUISIANA A moderate infestation of loblolly pine sawfly, *N. taedae linearis*, on 2,300 acres in Grant and Winn Parishes was examined this spring. Generally, it was determined that defoliation was less severe than a year ago. (Louisiana Forestry Commission)
- MISSISSIPPI The loblolly pine sawfly, *N. taedae linearis*, defoliated 16,000 acres in Lowndes County this spring. The infestation was examined and the damage determined to be of moderate proportions. (Mississippi Forestry Commission)
- TENNESSEE Virginia pine sawfly began hatching in the Eastern Highland Rim and eastern Tennessee April 15. The Virginia pine sawfly was observed for the first time in Sequatchie, Van Buren, Bledsoe (Falls Creek State Park), and Cumberland counties. The Arkansas sawfly was reported in western Tennessee. (Tennessee Division of Forestry)
- VIRGINIA The Virginia pine sawfly caused light to heavy defoliation on the Dry River and Lee Ranger Districts of the George Washington National Forest in Virginia. Several pine stands on the Massanutten Mountain were heavily defoliated for the second consecutive year. No tree mortality has been observed. (Division of Forest Pest Control)

NANTUCKET PINE TIP MOTH, *Rhyacionia frustrana* (Comstock)

- ARKANSAS Postspray damage to shortleaf pine tips at the Ouachita Seed Orchard ranged from 0 to 27 percent; whereas, pre-spray counts ranged from 14 to 44 percent. The Ouachita seed source had no *Dioryctria* spp. in sample trees. The chemical applications of dimethoate in late April were more effective than those in early April.
- Conelet mortality during flowering and postflowering ranged from 40 to 50 percent. However, as cones harden they will become unattractive to the tip moth.

NANTUCKET PINE TIP MOTH (Cont'd)

- LOUISIANA Chemical treatment of tip moth infestations at the Stuart Orchard, Kisatchie National Forest, has reduced from 60 percent or more damaged tips on loblolly and shortleaf pines in January to 20 percent or less in May. However, numbers of live insects per dead or dying tips is .39 to 1.00 live larvae or pupae/dead tip.
- MISSISSIPPI An evaluation of tip moth in May on the Erambert Seed Orchard showed damage greatly reduced since January, 1971. The evaluation in January showed 8-60 percent tips killed by this insect in Alabama loblolly, southern Mississippi loblolly, Florida sand pine and Mississippi shortleaf, with the latter having the highest percent damage. Mississippi shortleaf had only 0.9 percent of the tips damaged in May while Alabama and southern Mississippi loblolly were reduced to 0%. The Florida sand pine damage was reduced from 16 to 12 percent damaged tips; however, very few tips contained live tip moths. Dimethoate insecticide applied by a hydraulic power sprayer during April was used to control this insect.
- NORTH CAROLINA The Nantucket pine tip moth *Rhyacionia frustrana* (Comstock) is continuing to cause damage to shortleaf and Virginia pine on the Beech Creek Seed Orchard despite a March application of granular phorate. A recent evaluation of the Orchard's tip moth population found 45% of the trees in the George Washington-Jefferson Virginia pine geographic source infested with living larvae. The number of trees infested in other geographic sources ranged from 0.3 to 16.3 percent.
- NORTH CAROLINA Forty percent of the trees in the Georgia loblolly pine geographic source on the Francis Marion Seed Orchard were found to be infested during a May evaluation of the tip moth population. Approximately 12 percent of the trees in the shortleaf and other loblolly sources were found to be infested.

BALSAM WOOLLY APHID, *Adelges picea* (Ratz.)

- NORTH CAROLINA The balsam woolly aphid continues to cause serious mortality in Fraser fir stands in the Southern Appalachian Mountains. An aerial survey conducted by the Division of Forest Pest Control in June indicated new infestations on Roan Mountain, Shining Rock, and Waterrock Knob in North Carolina. Mount Rogers in Virginia is the only area of spruce-fir type in the South where the aphid has not been detected.

HARDWOOD DEFOLIATORS

FOREST TENT CATERPILLAR, *Malacosoma disstria* Hubner

- ALABAMA Approximately 47,000 acres of water tupelo ponds were defoliated in the Mobile and Tensas River Basins of southwest Alabama. The area and intensity of defoliation was approximately the same as last year. (Alabama Forestry Commission)
- KENTUCKY The forest tent caterpillar is defoliating hardwood in three locations near Madisonville totalling 25 square miles.
- LOUISIANA The forest tent caterpillar defoliated 520,000 acres in south Louisiana this year. The area of infestation covered approximately 43,000 acres more than last year. Heavy defoliation was observed in the parishes of Ascension, Livingston, St. John the Baptist, St. James, Lafourche, Terrebonne, and Assumption. (Louisiana Forestry Commission)

VARIABLE OAK LEAF CATERPILLAR, *Heterocampa manteo* Dbldy.

- ARKANSAS An evaluation of overwintering variable oak leaf caterpillar prepupae was conducted by the Division of Forest Pest Control and Arkansas Forestry Commission during March, 1971. Based on 240 plots examined, overall reduction in prepupal counts since the November evaluation was 47 percent. However, the Conway-Little Rock and Heber Springs areas showed mean population counts of over 0.5 prepupae/ft². Areas with over .5 prepupae/ft² are likely to experience heavy defoliation this summer. In general, areas with defoliation last year will probably have some defoliation in 1971. Moth emergence began the last week of May with many caterpillars still in the prepupal stage at this time.

FALL CANKERWORM, *Alsophila pometaria* Harr.

- NORTH
CAROLINA Defoliation by the fall cankerworm increased in 1971 on the Coweeta Hydrological Laboratory. Heavy defoliation was found at higher elevations on species of the red oak group, ash, and hickory. The area of infestation has spread down into the watershed. (Division of Forest Pest Control)

MISCELLANEOUS INSECTS

SPITTLEBUGS, *Aphrophora* spp.

NORTH CAROLINA The pine spittlebug *Aphrophora parallela* (Say) is reported causing minor damage to pines in Davidson and Person counties. The Saratoga spittlebug *A. saratogensis* (Fitch) was found in eastern North Carolina on loblolly pine. (North Carolina Forest Pest Newsletter)

WEEVILS, *Pissodes* sp., *Pachylobius* sp., and *Hylobius* sp.

MISSISSIPPI Scattered infestation of *Pissodes nemorensis* have been observed in 12 counties in northwest Mississippi

There has been a heavy buildup of reproduction weevils, *Pachylobius picivorus* and *Hylobius pales* in pole and piling class timber in the counties affected by Hurricane Camille. (Mississippi Forestry Commission)

TENNESSEE A weevil tentatively identified as the deodar weevil *Pissodes nemorensis* Germar is causing light damage to terminals of loblolly pine 20 feet or more in height in western Tennessee. The damage is especially noticeable in Madison, Chester, Henderson, and McNary counties and Chickasaw State Forest. (Tennessee Division of Forestry)

SOFT SCALE, *Toumeyella* sp. near *pini* (King)

ALABAMA This scale was found heavily infesting an occasional small slash pine on the Geneva State Nursery, Samson, Alabama.

PINE NEEDLE SCALE, *Phenacaspis pinifoliae* (Fitch)

ALABAMA This scale was found on loblolly pine, in light infestations, LOUISIANA at the Stuart Seed Orchard, Louisiana; Erambert Seed Orchard, MISSISSIPPI Mississippi; and the Geneva State Nursery, Alabama.

TEXAS LEAF CUTTING ANT, *Atta texana* Buckley

TEXAS Approximately 3,400 seedlings have been damaged in Nacogdoches, Shelby, San Augustine, Bastrop, Waller, Newton and Caldwell Counties by the Texas leaf cutting ant. (Forest Pest Activity Report, Texas Forest Service)

STATUS OF FOREST DISEASES

ATROPELLIS CANKER, *Atropellis tingens*, Loman & Cash

ARKANSAS

Girdling of small branches of shortleaf pine by the fungus resulted in twig dieback in a poletimber plantation. More than 75% of the trees were affected. *Pityophthorus* sp. beetles were found to be active in the recently killed twigs.

SOUTHERN PINE NEEDLE BLIGHT

GULF COAST

Pathologists at the Southern Forest Experiment Station and Rocky Mountain Forest and Range Experiment Station have identified several species of needle cast fungi as responsible for causing needle blight throughout the Gulf South. A survey, by the Division of Forest Pest Control, of the infected areas in Texas, Louisiana, Mississippi, Alabama, Georgia and Florida revealed 54,832,440 acres affected by the blight. The primary species affected was slash pine; loblolly and longleaf were affected to a lesser extent. *Lophodermella cerina* (Danker) was the primary fungus causing needle damage in south Louisiana, Mississippi and southeast Alabama; *Hypoderma lethale* (Dearn) was the primary cause of needle necrosis in southeast Alabama, south Georgia, and northern Florida. *Lophodermium australe* (Dearn) was also identified in many of the foliage samples collected throughout the affected areas; but is believed to be a minor cause of the needle disorder.

ANNOSUS ROOT ROT caused by *Fomes annosus* (Fr.) Karst

NORTH CAROLINA

Additional windthrow and mortality continue in an eastern white pine plantation near the Toe River on the Toecane District of the Pisgah National Forest. Mortality has been reported occurring in this plantation for over two decades and it now appears that the stand will be a total loss due to the disease. (Division of Forest Pest Control)

VIRGINIA

Windthrow and mortality of eastern white pine have been found scattered throughout the Shifflett Plantation on the Dry River District of the George Washington National Forest. An evaluation by the Division of Forest Pest Control of an 80 acre portion of the plantation, with high potential use for recreation, revealed 20 percent of the stand had suffered windthrow and 52 percent of the remaining trees were infected at stump level (2- to 4-inch stumps). (Division of Forest Pest Control)

ARMELLARIA ROOT ROT caused by *Armellaria mellea* (Vahl) Quel

NORTH CAROLINA Severe mortality and dieback has been found in a 10 acre stand of natural yellow poplar on the Cheoah District of Nantahala National Forest. Dead trees were found to have an abundance of rhizomorphs of *Armellaria mellea* running up the bole between the bark and wood. It has not yet been positively ascertained whether *Armellaria* is acting as the primary agent causing this mortality or acting in combination with some other factor. (Division of Forest Pest Control)

SYCAMORE ANTHRACNOSE caused by *Gnomonia veneta* (Sacc. & Speg.)

NORTH CAROLINA VIRGINIA This disease has been observed to be causing widespread and extensive damage in the Appalachian Mountains and Piedmont of Virginia and North Carolina. Apparently the disease has been favored by the wet, moist spring. (Division of Forest Pest Control)

COMANDRA RUST caused by *Cronartium commandrae* Pk.

TENNESSEE A recent fourth annual evaluation of permanent plots in a loblolly plantation of eastern Tennessee by the Division of Forest Pest Control and Tennessee Department of Conservation has further substantiated the results of last year's survey. The rate of new infection occurring each year has declined rapidly since the initiation of the study in 1968.. Apparently the alternate host, toadflax, is shaded out by the closing of the forest canopy in the rapidly growing loblolly pine plantations.

FOLIAGE DISEASES OF HARDWOODS

SOUTHEAST-ERN AREA The cool wet weather this spring has apparently resulted in conditions favoring disease development on hardwood foliage. Oak leaf blister (caused by *Taphrine caerulescens* (Desm.) Tul.), oak anthracnose (caused by *Gnomonia veneta* (Sacc. & Speg) Kleb.) and a leaf spot of maple (caused by *Phyllosticta minima* (Berk. and Curt.) Ell. & Ev.) have been particularly evident.

NURSERY DISEASES

NORTH
CAROLINA

Cylindrocladium root rot caused by *Cylindrocladium floridanum* and *C. scoparium* continues to be a severe problem within hardwood nursery seedbeds in the Southeast. In 1970, 50 percent of 40,000 1-0 black walnut seedlings were lost to *C. scoparium* infection in the Griffith State Nursery at Clayton, North Carolina. Recent field observations and laboratory diagnoses have revealed cylindrocladium infection in the 1971 walnut seedbeds at this nursery. Approximately 10 percent dead and dying seedlings were detected in the current 100,000+ walnut seedling crop. It is also interesting to note that standard methyl bromide fumigation (350 lbs./acre) was employed prior to seeding in both of the above cases.

More detailed information can be obtained by writing to the Forest Pest Management Group Field Offices listed below or the Atlanta Office:

FIELD OFFICES

Asheville Office
John L. Rauschenberger
Zone Supervisor
U. S. Forest Service
Post Office Box 5895
Asheville, North Carolina 28803

Phone: (704) 254-0961 Ext. 625

FOR STATES OF:

Florida
Georgia
Kentucky
North Carolina
South Carolina
Tennessee
Virginia

Alexandria Office
James L. Stewart
Zone Supervisor
U. S. Forest Service
2500 Shreveport Highway
Pineville, Louisiana 71360

Phone: (318) 445-6511 Ext. 311

Alabama
Arkansas
Louisiana
Mississippi
Oklahoma
Texas

AREA OFFICE

Amel E. Landgraf
Group Leader
Forest Pest Management
U. S. Forest Service
1720 Peachtree St., N. W., Room 702
Atlanta, Georgia 30309

Phone: (404) 526-3734

